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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,850	07/28/2006	Max Mayer		9774
7590 Bernhard Bausenwein Eichenstr 32 Hagelstadt, D-93095 GERMANY				
			EXAMINER CHAPEL, DEREK S	
			ART UNIT 2872	PAPER NUMBER
			MAIL DATE 11/12/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/587,850

**Applicant(s)**

MAYER ET AL.

**Examiner**

DEREK S. CHAPEL

**Art Unit**

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11, 13-24, 26 and 31-35 is/are pending in the application.  
4a) Of the above claim(s) 9-11 and 19 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 2-8, 13-18, 20-24, 26 and 31-35 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 9/29/09, 7/28/06, 10/4/10 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/4/2010 has been entered.

### ***Status Of Claims***

2. This Office Action is in response to an amendment received 10/4/2010 in which Applicant lists claims 9-11 and 19 as being withdrawn, claims 1, 12, 25 and 27-30 as being cancelled, claims 2-8, 13-15, 21-24, 26, 31 and 34 as being currently amended, and claims 16-18, 20, 32-33 and 35 as being previously presented. It is interpreted by the examiner that claims 2-11, 13-24, 26 and 31-35 are pending.

### ***Status Of Case***

3. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450.

***Drawings***

4. The drawings were received on 10/4/2010. These drawings are accepted.

***Specification***

5. The amendments to the specification dated 10/4/2010 are accepted. The objections to the specification cited in the office action mailed 7/7/2010 are hereby withdrawn.

***Claim Objections***

6. The amendments to the claims dated 10/4/2010 are accepted. The objections to the claims cited in the office action mailed 7/7/2010 are hereby withdrawn.

***Claim Rejections - 35 USC § 112***

7. The amendments to the claims dated 10/4/2010 are accepted. The rejections of the claims made under 35 USC 112 second paragraph and cited in the office action mailed 7/7/2010 are hereby withdrawn.
8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2-8, 13-18, 20-24, 26, and 31-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
10. Regarding claim 31, the phrase "e.g." renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claims 2-8, 13-18, 20-24, 26, and 32-35 depend from claim 31 and therefore have been rejected for inheriting the same informalities as claim 31.

**A sample of claim 31 has been provided by the examiner below to show how it should read:**

*"Complex polarizer system,*  
*comprising an arrangement of at least three polarizing beam splitting*  
*layers  $P_i$ , wherein  $i=1, 2, 3$  or  $4$ ;*  
*each  $P_i$  being characterized by its layer vector  $V_i$ ,*  
*whereas  $V_i$  equals the direction vector of the intersection line of  $P_i$  and the*  
*plane of polarization of any light beam reflected by  $P_i$  without additional*  
*polarization rotating components;*  
*a first polarizing beam splitting layer ( $P_1$ ) being configured to split an*  
*unpolarized light beam propagating along a first axis ( $A_1$ ) into a transmitted*  
*linearly polarized light beam transmitted by first polarizing beam splitting layer*  
*( $P_1$ ), and a reflected linearly polarized light beam reflected by first polarizing*  
*beam splitting layer ( $P_1$ ) along a second axis ( $A_2$ );*  
*a second polarizing beam splitting layer ( $P_2$ ) being arranged along the first*

*axis (A1) such that*

*the first axis (A1) and a second polarizing layer vector (V2) span a plane which is normal to the plane spanned by the first axis (A1) and a first polarizing layer vector (V1),*

*the second polarizing beam splitting layer (P2) and the first polarizing beam splitting layer (P1) therefore being configured as a polarizing beam splitting system,*

*wherein the transmitted linearly polarized beam which was transmitted by the first polarizing beam splitting layer (P1) along the first axis (A1) is reflected at the second polarizing beam splitting layer (P2) without interjacent polarization rotating components, wave plates or active rotators, between the first and second polarizing beam splitting layers (P1, P2);*

*a third polarizing beam splitting layer (P3) being arranged along the second axis (A2) such that*

*the second axis (A2) and a third polarizing layer vector (V3) span a plane which is normal to the plane spanned by the second axis (A2) and the first polarizing layer vector (V1),*

*the third polarizing beam splitting layer (P3) and the first polarizing beam splitting layer (P1) therefore being configured as a polarizing beam splitting system*

*wherein the reflected linearly polarized beam reflected by the first polarizing beam splitting layer (P1) into the second axis (A2) is transmitted at the*

*third polarizing beam splitting layer (P3) without interjacent polarization rotating components, wave plates or active rotators, between the first and the third polarizing beam splitting layers (P1, P3)."*

**Allowable Subject Matter**

11. Claims 2-8, 13-18, 20-24, 26, and 31-35 are objected to for being rejected under 35 USC 112 second paragraph above, but would be allowable if rewritten to overcome the 112 rejection set forth above.
12. The following is a statement of reasons for the indication of allowable subject matter:

Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable over the cited art of record, if rewritten to overcome the 112 rejection set forth above, for at least the reason that the cited art of record fails to teach or reasonably suggest a complex polarizer system comprising a first polarizing beam splitting layer (P1) being configured to split an unpolarized light beam propagating along a first axis (A1) into a transmitted linearly polarized light beam transmitted by first polarizing beam splitting layer (P1), and a reflected linearly polarized light beam reflected by first polarizing beam splitting layer (P1) along a second axis (A2); a second polarizing beam splitting layer (P2) being arranged along the first axis (A1) such that the first axis (A1) and a second polarizing layer vector (V2) span a plane which is normal to the plane spanned by the first axis (A1) and a first polarizing layer vector (V1), the second polarizing beam splitting layer (P2) and the first polarizing beam splitting layer (P1) therefore being configured as a polarizing beam splitting system, wherein the

transmitted linearly polarized beam which was transmitted by the first polarizing beam splitting layer (P1) along the first axis (A1) is reflected at the second polarizing beam splitting layer (P2) without interjacent polarization rotating components, wave plates or active rotators, between the first and second polarizing beam splitting layers (P1, P2); a third polarizing beam splitting layer (P3) being arranged along the second axis (A2) such that the second axis (A2) and a third polarizing layer vector (V3) span a plane which is normal to the plane spanned by the second axis (A2) and the first polarizing layer vector (V1), the third polarizing beam splitting layer (P3) and the first polarizing beam splitting layer (P1) therefore being configured as a polarizing beam splitting system

wherein the reflected linearly polarized beam reflected by the first polarizing beam splitting layer (P1) into the second axis (A2) is transmitted at the third polarizing beam splitting layer (P3) without interjacent polarization rotating components, wave plates or active rotators, between the first and the third polarizing beam splitting layers (P1, P3), as generally set forth in claim 31, the device including the totality of the particular limitations recited in claim 31. Claims 2-8, 13-18, 20-24, 26, and 32-35 depend from claim 31 and therefore would be allowable for at least the same reasons as claim 31.

### ***Response to Arguments***

13. Applicant's arguments, see pages 50-56, filed 10/4/2010, with respect to the prior art rejections of the claims have been fully considered and are persuasive. The rejections of the claims have been withdrawn.



### ***Amendment Guidelines***

14. For the applicant's convenience and to assist you in providing future amendments that are in compliance with the M.P.E.P, section C of section 714 of the M.P.E.P. regarding amendments to the claims has been copied below:

#### **C. Amendments to the Claims**

Each amendment document that includes a change to an existing claim, including the deletion of an existing claim, or submission of a new claim, must include a complete listing of all claims ever presented (including previously canceled and non-entered claims) in the application. After each claim number, the status identifier of the claim must be presented in a parenthetical expression, and the text of each claim under examination as well as all withdrawn claims (each with markings if any, to show current changes) must be presented.

The listing will serve to replace all prior versions of the claims in the application.

(A) Status Identifiers: The current status of all of the claims in the application, including any previously canceled or withdrawn claims, must be given. Status is indicated in a parenthetical expression following the claim number by one of the following status identifiers:

(original),  
(currently amended),  
(previously presented),  
(canceled),  
(withdrawn),  
(new),  
or (not entered).

The status identifier (withdrawn – currently amended) is also acceptable for a withdrawn claim that is being currently amended. See paragraph (E) below for acceptable alternative status identifiers.

Claims added by a preliminary amendment must have the status identifier (new) instead of (original), even when the preliminary amendment is present on the filing date of the application and such claim is treated as part of the original disclosure. If applicant files a subsequent amendment, applicant must use the status identifier (previously presented) if the claims are not being amended, or (currently amended) if the claims are being amended, in the subsequent amendment. Claims that are canceled by a preliminary amendment that is present on the filing date of the application are required to be listed and must have the status identifier (canceled) in the preliminary amendment and in any subsequent amendment.

The status identifier (not entered) is used for claims that were previously

proposed in an amendment (e.g., after-final) that was denied entry.

> In an amendment submitted in a U.S. national stage application, claims that were present on the international filing date or rectified pursuant to PCT Rule 91 must

have the status identifier (original); claims that were amended or added under PCT

Article 19 or 34 with effect in the U.S. national stage application must have the status identifier (previously presented); and claims that were canceled pursuant to

PCT Article 19 or 34 with effect in the U.S. national stage application must have the status identifier (canceled). If the amendment submitted in the U.S. national stage application is making a change in a claim, the status identifier (currently amended) must be used for that claim.<

For any amendment being filed in response to a restriction or election of species

requirement and any subsequent amendment, any claims which are non-elected must have the status identifier (withdrawn). Any non-elected claims which are being amended must have either the status identifier (withdrawn) or (withdrawn – currently amended) and the text of the non-elected claims must be presented with

markings to indicate the changes. Any non-elected claims that are being canceled

must have the status identifier (canceled).

(B) Markings to Show the Changes: All claims being currently amended must

be presented with markings to indicate the changes that have been made relative to

the immediate prior version. The changes in any amended claim must be shown by

strike-through (for deleted matter) or underlining (for added matter) with 2 exceptions: (1) for deletion of five or fewer consecutive characters, double brackets may be used (e.g., [[eroor]]); (2) if strike-through cannot be easily perceived (e.g., deletion of number “4” or certain punctuation marks), double brackets must be used (e.g., [[4]]). As an alternative to using double brackets, however, extra portions of text may be included before and after text being deleted, all in strike-through, followed by including and underlining the extra text with the desired change (e.g., \_\_\_\_\_ number 4 as number 14 as). An accompanying

clean version is not required and should not be presented. Only claims of the status “currently amended” or “withdrawn” will include markings.

Any claims added by amendment must be indicated as “new” and the text of the claim must not be underlined.

(C) Claim Text: The text of all pending claims under examination and withdrawn claims must be submitted each time any claim is amended. The text of

pending claims not being currently amended, including withdrawn claims, must be presented in clean version, i.e., without any markings. Any claim presented in clean version will constitute an assertion that it has not been changed relative to the immediate prior version except to omit markings that may have been present in the immediate prior version of the claims. A claim being canceled must be indicated as "canceled;" the text of the claim must not be presented. Providing an instruction to cancel is optional. Canceled and not entered claims must be listed by only the claim number and status identifier, without presenting the text of the claims. When applicant submits the text of canceled or not-entered claims in the amendment, the Office may accept such an amendment, if the amendment otherwise complies with 37 CFR 1.121, instead of sending out a notice of non-compliant amendment to reduce the processing time.

(D) Claim Numbering: All of the claims in each amendment paper must be presented in ascending numerical order. Consecutive canceled or not entered claims may be aggregated into one statement (e.g., Claims 1 – 5 (canceled)).

A canceled claim can be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number. The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. For example, when applicant cancels all of the claims in the original specification and adds a new set of claims, the claim listing must include all of the canceled claims with the status identifier (canceled) (the canceled claims may be aggregated into one statement). The new claims must be numbered consecutively beginning with the number next following the highest numbered claim previously presented (whether entered or not) in compliance with 37 CFR 1.126.

Example of listing of claims:

Claims 1-5 (canceled)

Claim 6 (withdrawn): A process for molding a bucket.

Claim 7 (previously presented): A bucket with a handle.

Claim 8 (currently amended): A bucket with a \_\_\_\_ green blue handle.

Claim 9 (withdrawn): The process for molding a bucket of claim 6 using molten plastic material.

Claim 10 (original): The bucket of claim 8 with a wooden handle.

Claim 11 (canceled)

Claim 12 (previously presented): A bucket having a circumferential upper lip.

Claim 13 (not entered)

Claim 14 (new): A bucket with plastic sides and bottom.

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 10:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Derek S Chapel/  
Examiner, Art Unit 2872  
11/8/2010